

Abstract

Methods and systems consistent with the present invention provide improved online detection of one or more shorts in rotor turns (18) of a field winding (22) of an electric generator. An initial reference inductance L_{REF} is determined by an impedance-measuring circuit (50). A subsequent inductance L is determined by the impedance measuring circuit (50). A data processing system (54) compares L_{REF} to L to determine whether they differ by a predetermined amount. If L_{REF} and L differ by the predetermined amount, an alarm is provided to operators to indicate the presence of one or more shorted rotor turns.